

BJO

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	18	TSUJI-YOSHIYUKI.IN.	US-PGPUB; USPAT	OR	ON	2006/08/07 16:54
S2	7	TSUJIMOTO-TOSHIO.IN.	US-PGPUB; USPAT	OR	ON	2006/08/08 11:24
S3	650	428/34.4	US-PGPUB; USPAT	OR	ON	2006/11/29 16:02
S4	1777	428/34.1	US-PGPUB; USPAT	OR	ON	2006/08/07 16:43
S5	9	S1 AND crucible	US-PGPUB; USPAT	OR	ON	2006/08/07 16:44
S6	6	S2 AND crucible	US-PGPUB; USPAT	OR	ON	2006/08/07 16:45
S7	63	S3 AND crucible	US-PGPUB; USPAT	OR	ON	2006/08/07 16:45
S8	27	S4 AND crucible	US-PGPUB; USPAT	OR	ON	2006/08/07 16:45
S9	11	(S5 OR S6 OR S7 OR S8) AND groove	US-PGPUB; USPAT	OR	ON	2006/08/07 16:47
S10	9	(S5 OR S6 OR S7 OR S8) AND groove AND silica and crucible	US-PGPUB; USPAT	OR	ON	2006/08/07 17:06
S11	4	("5800924"   "5922127"   "5954875"   "5972488").PN. OR ("6524668").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 16:52
S12	4	S11 AND crucible	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 16:52
S13	0	S11 AND crucible AND groove AND silica	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 16:52
S14	1	S11 AND crucible AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 16:52
S15	1	S1 and crucible AND groove	US-PGPUB; USPAT	OR	ON	2006/08/07 16:56
S16	12	"JAPAN SUPER QUARTZ CORPORATION"	US-PGPUB; USPAT	OR	ON	2006/08/08 10:05
S17	1	"JAPAN SUPER QUARTZ CORPORATION" AND crucible and groove	US-PGPUB; USPAT	OR	ON	2006/08/07 16:56
S18	12	"JAPAN SUPER QUARTZ CORPORATION" AND crucible	US-PGPUB; USPAT	OR	ON	2006/08/07 16:56

## EAST Search History

S19	8	crucible AND groove AND silica AND groove AND depth SAME length SAME width	US-PGPUB; USPAT	OR	ON	2006/08/07 16:58
S20	0	crucible.AB. AND groove and silica	US-PGPUB; USPAT	OR	ON	2006/08/07 16:59
S21	43	crucible.AB. AND groove and silica	US-PGPUB; USPAT	OR	ON	2006/08/07 16:59
S22	63	groove SAME crucible AND silica	US-PGPUB; USPAT	OR	ON	2006/08/07 17:11
S23	133	crucible AND width SAME depth SAME groove	US-PGPUB; USPAT	OR	ON	2006/08/07 17:54
S24	21	("2139215"   "3844336"   "4142571").PN. OR ("4212343").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 17:27
S25	8	S24 AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 17:27
S26	26	("2397004"   "2397005"   "4213787"   "4390638"   "4435511"   "4520115"   "4521524"   "4537862"   "4732876"   "4816949"   "4824809"   "4855261"   "4940678"   "4957883"   "5029032"   "5032315"   "5204293"   "5222006"   "5224001"   "5245492"   "5262363"   "5264400"   "5284706").PN. OR ("6503858").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 17:30
S27	6	S26 AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 17:30
S28	12	("3605863"   "4211821"   "4212343"   "4289571"   "4333792").PN. OR ("4688623").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 17:33
S29	16	crucible SAME width SAME depth SAME groove	US-PGPUB; USPAT	OR	ON	2006/08/07 17:56
S30	67	"silica glass crucible"	US-PGPUB; USPAT	OR	ON	2006/08/07 17:56
S31	2	"silica glass crucible" AND groove	US-PGPUB; USPAT	OR	ON	2006/08/07 17:56
S32	23	silica WITH glass WITH crucible AND groove	US-PGPUB; USPAT	OR	ON	2006/08/07 17:57
S33	7	("20030074920"   "5053359"   "5609682"   "5704973"   "5730800"   "6553787"   "6652934").PN. OR ("6911080").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:09

## EAST Search History

S34	1	silica WITH glass WITH groove WITH depth WITH width AND sand WITH blast	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:12
S35	3	silica WITH glass WITH groove WITH depth WITH width	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:13
S36	287	glass WITH groove WITH depth WITH width	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:13
S37	5	glass WITH groove WITH depth WITH width AND crucible	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:27
S38	38	117/220	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:28
S39	141	432/262	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:27
S40	5	S38 AND crucible AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:48
S41	11	S39 AND crucible AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:51
S42	228	semiconductor AND crucible AND groove AND crystal WITH silicon	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 18:52
S43	9	semiconductor AND crucible AND groove AND crystal WITH silicon AND "pulling up"	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:07
S44	5	semiconductor AND crucible AND groove AND crystal AND "pulling up" NOT S43	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:08
S45	1	semiconductor AND crucible AND groove AND crystal AND "pulling up" AND sand WITH blast	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:09
S46	1	semiconductor AND crucible AND groove AND crystal AND sand WITH blast	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:09
S47	0	semiconductor AND crucible AND groove AND crystal AND sandblast	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:10
S48	469	semiconductor AND crucible AND groove AND crystal	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:11

## EAST Search History

S49	102	semiconductor AND crucible SAME groove AND crystal	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:12
S50	24	semiconductor AND crucible SAME groove SAME depth AND crystal	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:17
S51	46	semiconductor AND crucible AND groove SAME outer WITH surface	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:19
S52	33	semiconductor AND crucible AND groove SAME outer NEAR3 surface	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/07 19:19
S53	86	"shin-etsu quartz"	US-PGPUB; USPAT	OR	ON	2006/08/08 10:09
S54	35	"shin-etsu quartz" AND crucible	US-PGPUB; USPAT	OR	ON	2006/08/08 10:09
S55	2	"shin-etsu quartz" AND crucible AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 10:10
S56	13	"heraeus" AND crucible AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 10:40
S57	31	silica WITH glass SAME groove SAME depth SAME width	US-PGPUB; USPAT	OR	ON	2006/08/08 10:41
S58	4	silica WITH glass SAME groove SAME depth SAME width AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 10:43
S59	148	silica WITH glass AND groove SAME depth SAME width AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 10:47
S60	2	silica WITH glass AND groove SAME depth SAME width AND adhesion AND "fine groove"	US-PGPUB; USPAT	OR	ON	2006/08/08 10:48
S61	48	silica WITH glass AND "fine groove"	US-PGPUB; USPAT	OR	ON	2006/08/08 10:48
S62	11	silica WITH glass AND "fine groove" AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 10:49
S63	77	glass SAME "fine groove" AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 10:52
S64	207	glass AND adhesion AND sandblast AND acid	US-PGPUB; USPAT	OR	ON	2006/08/08 10:53
S65	79	glass AND adhesion AND sandblast AND acid AND depth	US-PGPUB; USPAT	OR	ON	2006/08/08 10:53
S66	79	glass AND adhesion AND sandblast AND acid AND depth AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 11:26
S67	617	501/1	US-PGPUB; USPAT	OR	ON	2006/08/08 11:25

## EAST Search History

S68	3	501/1 AND groove and adhesion and glass	US-PGPUB; USPAT	OR	ON	2006/08/08 11:25
S69	146	glass AND adhesion AND sandblast AND depth	US-PGPUB; USPAT	OR	ON	2006/08/08 11:31
S70	87	sandblast SAME glass AND bond	US-PGPUB; USPAT	OR	ON	2006/08/08 11:32
S71	15	sandblast SAME glass AND bond AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 11:33
S72	87	sandblast SAME glass AND bond	US-PGPUB; USPAT	OR	ON	2006/08/08 11:33
S73	265	sandblast SAME glass	US-PGPUB; USPAT	OR	ON	2006/08/08 11:35
S74	30	sandblast SAME glass AND etch	US-PGPUB; USPAT	OR	ON	2006/08/08 11:38
S75	492	216/52	US-PGPUB; USPAT	OR	ON	2006/08/08 11:38
S76	63	216/52 AND groove and depth	US-PGPUB; USPAT	OR	ON	2006/08/08 11:42
S77	4790	451/41	US-PGPUB; USPAT	OR	ON	2006/08/08 11:42
S78	1485	451/41 AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 11:42
S79	726	451/41 AND groove AND depth	US-PGPUB; USPAT	OR	ON	2006/08/08 11:45
S80	2	451/41 AND groove AND depth AND sandblast	US-PGPUB; USPAT	OR	ON	2006/08/08 11:43
S81	34	451/41 AND groove AND depth AND fine WITH groove	US-PGPUB; USPAT	OR	ON	2006/08/08 11:46
S82	1	sandblast WITH crucible	US-PGPUB; USPAT	OR	ON	2006/08/08 11:46
S83	163	sandblast WITH glass	US-PGPUB; USPAT	OR	ON	2006/08/08 11:50
S84	456	groove WITH glass AND abrasive	US-PGPUB; USPAT	OR	ON	2006/08/08 11:50
S85	46	groove WITH silica AND abrasive	US-PGPUB; USPAT	OR	ON	2006/08/08 11:52
S86	147	fine WITH groove AND silica WITH glass	US-PGPUB; USPAT	OR	ON	2006/08/08 11:56
S87	158	silica WITH glass WITH groove	US-PGPUB; USPAT	OR	ON	2006/08/08 11:59
S88	61	"451".CLAS. and sandblast and glass	US-PGPUB; USPAT	OR	ON	2006/08/08 12:00
S89	8	"51".CLAS. and sandblast and glass	US-PGPUB; USPAT	OR	ON	2006/08/08 12:02

## EAST Search History

S90	0	"51".CLAS. and sandblast and glass AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 12:02
S91	216	sandblast and glass AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 12:02
S92	91	sandblast and glass AND groove AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 12:03
S93	0	sandblast.CLM. AND glass.CLM. AND adhesion.CLM.	US-PGPUB; USPAT	OR	ON	2006/08/08 12:06
S94	24	sandblast.CLM. AND glass.CLM.	US-PGPUB; USPAT	OR	ON	2006/08/08 12:09
S95	20	glass SAME groove SAME depth SAME adhere	US-PGPUB; USPAT	OR	ON	2006/08/08 12:39
S96	0	adhesive WITH bonding WITH glass	US-PGPUB; USPAT	OR	ON	2006/08/08 12:39
S97	0	adhesive SAME bonding SAME glass	US-PGPUB; USPAT	OR	ON	2006/08/08 12:39
S98	10403	adhesive SAME bonding SAME glass	US-PGPUB; USPAT	OR	ON	2006/08/08 12:39
S99	557	adhesive WITH bonding WITH glass AND grooves	US-PGPUB; USPAT	OR	ON	2006/08/08 12:40
S100	163	adhesive WITH bonding WITH glass AND grooves AND silica	US-PGPUB; USPAT	OR	ON	2006/08/08 12:40
S101	87	adhesive WITH bonding WITH glass AND grooves AND silica AND depth	US-PGPUB; USPAT	OR	ON	2006/08/08 12:52
S102	737	"156".CLAS. AND glass SAME groove	US-PGPUB; USPAT	OR	ON	2006/08/08 12:53
S103	304	"156".CLAS. AND glass SAME groove AND depth	US-PGPUB; USPAT	OR	ON	2006/08/08 12:53
S104	191	"156".CLAS. AND glass SAME groove AND depth AND adhesive	US-PGPUB; USPAT	OR	ON	2006/08/08 12:59
S105	191	"156".CLAS. AND glass SAME groove AND depth AND adhesive AND glass	US-PGPUB; USPAT	OR	ON	2006/08/08 13:36
S106	24	"156".CLAS. AND glass SAME groove AND depth AND adhesive AND glass AND silica	US-PGPUB; USPAT	OR	ON	2006/08/08 13:00
S107	6	"156".CLAS. AND glass SAME groove AND depth AND adhesive AND sandblasting	US-PGPUB; USPAT	OR	ON	2006/08/08 13:38
S108	66	glass SAME groove AND depth AND adhesive AND sandblasting NOT S105	US-PGPUB; USPAT	OR	ON	2006/08/08 13:46
S109	1	glass SAME groove AND depth AND adhesive AND sandblasting NOT S105 AND microgroove	US-PGPUB; USPAT	OR	ON	2006/08/08 13:39

## EAST Search History

S11 0	1	glass AND groove AND depth AND adhesive AND sandblasting NOT S105 AND microgroove	US-PGPUB; USPAT	OR	ON	2006/08/08 13:39
S11 1	1	glass AND groove AND sandblasting NOT S105 AND microgroove	US-PGPUB; USPAT	OR	ON	2006/08/08 13:39
S11 2	143	glass WITH sandblasting NOT S105 AND groove	US-PGPUB; USPAT	OR	ON	2006/08/08 13:46
S11 3	47	glass WITH sandblasting NOT S105 AND groove AND adhesion	US-PGPUB; USPAT	OR	ON	2006/08/08 13:46
S11 4	29	glass WITH sandblasting NOT S105 AND groove AND adhesion AND depth	US-PGPUB; USPAT	OR	ON	2006/08/08 13:47
S11 5	751	quartz SAME glass SAME crucible	US-PGPUB; USPAT	OR	ON	2006/11/25 08:20
S11 6	50	quartz SAME glass SAME crucible AND groove	US-PGPUB; USPAT	OR	ON	2006/11/25 08:22
S11 7	58	quartz SAME glass SAME crucible AND groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 08:42
S11 8	32	quartz SAME glass SAME groove AND crucible	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 08:49
S11 9	255	quartz SAME crucible AND groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 08:49
S12 0	38	quartz SAME crucible SAME groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 08:55
S12 1	77	quartz AND crucible WITH groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 08:57
S12 2	17	quartz AND crucible AND groove SAME length SAME depth	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:27
S12 3	8	crucible SAME fine WITH groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:28
S12 4	3	crucible SAME fine WITH groove SAME width	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:29

## EAST Search History

S12 5	2	quartz SAME fine WITH groove AND crucible	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:30
S12 6	39	quartz SAME fine WITH groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:30
S12 7	18	quartz SAME fine WITH groove AND width	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:32
S12 8	353	crucible WITH groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:32
S12 9	100	crucible WITH groove AND width	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:37
S13 0	73	crucible WITH groove AND width AND length	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:45
S13 1	40	crucible WITH groove AND width AND length AND depth	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 09:39
S13 2	73	crucible WITH groove AND width AND length AND groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 10:08
S13 3	39	117/220	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 10:08
S13 4	6	117/220 AND groove	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2006/11/25 10:08
S13 5	11	("3282641"   "3944393"   "4946542"   "5116456"   "5476679"   "5911824"   "5997640").PN. OR ("6200385").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:09
S13 6	2	S135 AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:10



## EAST Search History

S13 7	4	Swinehart-Carl-Francis.IN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:11
S13 8	4	Swinehart-Carl-Francis.IN. AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:12
S13 9	34	crucible SAME grow SAME groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:13
S14 0	14	crucible SAME grow SAME groove AND width	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:18
S14 1	19	crucible SAME grow AND crucible SAME groove SAME width	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:19
S14 2	32	length SAME width SAME depth SAME depth SAME groove and crystal WITH grow	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:20
S14 3	32	length SAME width SAME depth SAME groove and crystal WITH grow	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:29
S14 4	7	length SAME width SAME depth SAME groove and crystal WITH grow AND crucible	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:20
S14 5	4	("4990216"   "5087952"   "5525198"   "5597457").PN. OR ("6110273").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:28
S14 6	1	S145 AND groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:28
S14 7	6	length SAME width SAME depth SAME groove and crystal WITH grow AND (silica OR quartz)	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/25 10:29
S14 8	48	glass SAME ("sand blast" OR sand WITH blast) AND hydrofluoric WITH acid AND (etch OR etching)	US-PGPUB; USPAT	OR	ON	2006/11/29 16:04
S14 9	43	glass SAME ("sand blast" OR sand WITH blast) AND hydrofluoric WITH acid AND (etch OR etching) AND (adhesibility OR bond OR coat OR coated OR coating OR adhere)	US-PGPUB; USPAT	OR	ON	2006/11/29 16:05
S15 0	49	glass SAME ("sand blast" OR sand WITH blast) AND hydrofluoric WITH acid AND (etch OR etching) AND (adhesibility OR bond OR coat OR coated OR coating OR adhere)	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2006/11/29 16:07

## EAST Search History

S15 1	12	glass SAME ("sand blast" OR sand WITH blast) AND hydrofluoric WITH acid AND (etch OR etching) AND (adhesibility OR bond OR coat OR coated OR coating OR adhere) AND groove	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2006/11/29 16:07
S15 2	0	("2002/0078886").URPN.	USPAT	OR	ON	2006/11/29 16:10